(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 14 December 2000 (14.12.2000)

PCT

(10) International Publication Number WO 00/75821 A2

(51) International Patent Classification7:

G06F 17/60

(21) International Application Number: PCT/CA00/00668

(22) International Filing Date:

7 June 2000 (07.06.2000)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 09/327,193

7 June 1999 (07.06.1999) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US Filed on 09/327,193 (CON) 7 June 1999 (07.06.1999)

(71) Applicant and

- (72) Inventor: ARNOLD, J., Gordon [CA/CA]; 32 Glenorchy Road, Toronto, Ontario M3C 2P9 (CA).
- (74) Agent: BERESKIN & PARR; 40 King Street West, 40th Floor, Toronto, Ontario M5H 3Y2 (CA).

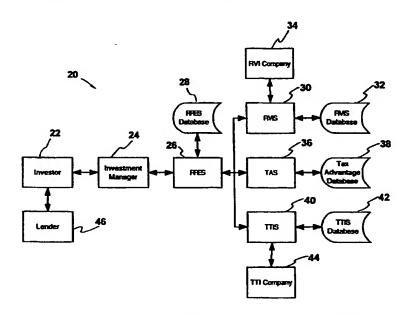
- (81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

 Without international search report and to be republished upon receipt of that report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM AND METHOD FOR CREATING A RISK INSURED INVESTMENT



(57) Abstract: The present invention provides a system and method for creating an improved type of investment which significantly alters the risk/reward ratio of traditional types of investments. The present invention uses a data processing system to create, evaluate and manage an investment that safeguards the residual value of the investment, maximizes the taxation advantage of the investment, insures against adverse taxation treatment by taxation authorities, and permits investors to invest in high risk/high yield investments with reduced or no risk of loss of investment capital or risk of illiquidity.

O 00/75821 A

WO 00/75821 PCT/CA00/00668

-1-

Title: System and Method for Creating a Risk Insured Investment

FIELD OF THE INVENTION

5

10

15

20

25

30

This invention relates to financial management systems and, more specifically, to a data processing and computing system and method for effecting an improved type of investment.

BACKGROUND OF THE INVENTION

There are currently a variety of investments that can be made by investors in various forms of business structures and financial instruments. The investments cover a broad range of structure, risk and reward profile, and liquidity. Traditional types of investments combine low risk and low reward, or medium risk and medium reward, or high risk and high reward, and so on. For medium risk and high risk investments, there is an increasing risk of loss of some or all of the capital investment, and an ongoing risk that the investment may be difficult or impossible to sell in order to realize gains or losses. Traditional types of investments can also attract varying degrees of taxation advantage for an investor, depending on the type of investments and the business structure used to make such an investment. Any investment that attracts a taxation advantage will carry a risk that taxation authorities may disallow or reduce the taxation advantage, thereby adversely affecting the rate of return earned by an investor.

The types of investments currently available to an investor include the following general categories:

Common equity shares: These shares entitle an investor to ownership of an undifferentiated portion of the corporate enterprise and voting rights at shareholder meetings. The entire amount of the investment is at risk at all times, since the corporation may become bankrupt or insolvent due to market forces, poor management or legal judgments. The potential rewards of the investment are capital appreciation

of the shares and any dividends declared by the corporation. Capital appreciation is dependent on the financial performance of the corporation from time to time. The declaration and payment of dividends is entirely dependent on the financial position of the corporation from time to time and the discretion of the board of directors of the corporation. The ability of an investor to sell the investment to achieve liquidity at any given time will be dependent on the market forces prevailing at the time. It will generally be easier for an investor to sell shares of a publicly traded corporation, since the sale of shares of a private corporation are commonly restricted by shareholder agreements.

0

15

5

10

20

25

Preferred equity shares: These shares combine elements of ownership and debt holding, entitling an investor to a stated annual dividend or return, either no voting rights or restricted voting rights, possible conversion rights into common shares, possible redemption of the shares by the corporation, and preferential treatment upon liquidation of the corporation. The entire amount of the investment is at risk at all times due to possible corporate bankruptcy or insolvency. The payment of the stated annual dividend is dependent on the financial position of the corporation from time to time. The liquidity of preferred equity shares will be affected by ongoing market forces. Preferred shares of a public corporation will generally be more liquid and preferred shares of a private corporation will be less liquid.

Convertible debt: The principle features of convertible debts are the right to convert the debt into common or preferred shares at a pre-determined conversion rate, and the right to be paid out in priority to equity holders in the event of

30

bankruptcy or insolvency. The interest rate payable on the debt tends to be lower than current market rates due to the conversion feature. The convertible debt investor/lender is exposed to less risk than shareholders due to the priority payout rights, but is still at risk for both interest payments and total loss of capital should the corporation not have the financial resources to make interest payments or sufficient unencumbered assets to secure the amount of the principal. Convertible debt is commonly a low liquidity investment, since no trading market normally exists for the trading of such investments.

Debt: Both fixed rate and variable debt investments are based on the payment of specified interest, or variable interest calculable based on agreed parameters, and an agreed time for the return of capital to the investor. While the investor's interest return is pre-determined, the ongoing payments of that return to an investor is subject to the ability of the corporation to make interest payments from time to time. The entire amount of the debt investment and unpaid interest is at risk at all times due to possible corporate bankruptcy or insolvency. The investor/lender may have preferential rights over shareholders in the event of bankruptcy or insolvency, or access to certain assets as security. Some debt instruments such as government bonds will be highly liquid, while other debt instruments issued by private corporation or private individuals will be highly illiquid.

Derivatives: Derivative instruments are formed from a contractual relationship established between two or more parties where payment is based on or derived from some

10

. 2

15

20

25

30

10

15

20

25

30

agreed upon benchmark. Since derivative instruments may be formed by agreement between two or more parties, the types of derivative products which may be developed are virtually limitless. Derivatives are risk shifting devices and parties entering into a derivative contract must fully comprehend the risks being assumed. The creditworthiness of each party to a derivative agreement affects the level of risk assumed and these risks must be constantly monitored and managed. Furthermore, the liquidity of derivative instruments will vary widely, depending on the instrument, the issuer of the instrument, and market forces at the time of proposed sale.

Partnerships: Partnership investments are similar to common share investments in a corporation, in that an investor becomes an owner of a portion of the partnership enterprise. The entire amount of the investment is at risk at all times, since the partnership may become bankrupt or insolvent due to market forces, poor management, or legal judgments. Partnership investments tend to be less liquid than share or debt investments, since normally no trading market exists, and new buyers are normally subject to the legal complexities of any partnership agreement.

The major risk element that is common to all of the above investments is the potential that an investor will lose some or all of the capital invested. While the assumption of this risk may be partially ameliorated by the potential to earn higher rewards from the investment, an investor must still assume the risk of loss of some or all of the investment. The assumption of this risk by an investor is a fundamental and negative element of these traditional types of investments.

The degree of liquidity inherent in an investment also has a

significant effect on the risk profile associated with the investment. The ability to freely sell an investment so as to realize a return of capital and any accrued rewards, or to realize a loss, is fundamental to the risk reward profile of the investment. The degree of liquidity is an important factor in most traditional investments, both at the beginning when investment choices are made, and throughout the term of the investment if market forces or other factors reduce an investment's liquidity. Liquidity is perceived by the investing marketplace to be one of the essential elements to be evaluated regarding the risk of an investment. Consequently, there is a need for an investment product which removes the necessity for liquidity and removes the risks created by a lack of liquidity.

10

15

20

25

30

Another variable that has a significant effect on the potential risk and reward to an investor for any particular investment is the taxation consequences of the investment. In most countries with sophisticated taxation regimes, including the United States, the making of an investment in common shares, preferred shares, convertible debt, debt or derivatives is not normally a deductible expense for the investor. This means that some or all of the investment remains at risk of loss, although some ameliorative taxation consequences may be available upon a realization of such loss by the investor. In contrast, under certain circumstances, many jurisdictions permit some or all partnership losses or, in the case of the United States, losses incurred by a limited liability corporation ("LLC"), to be attributed to an investor as these losses are incurred by the partnership or LLC. The customary effect of these attributed losses is to reduce the taxable income of the investor, and thereby reduce the amount of taxes payable by the investor. Each dollar of taxation that is not paid by an investor due to this attribution of losses represents a reduction in the real amount of investment that an investor has at risk. However, an investor still bears the risk of total loss of some or all of the remaining after tax investment amount. Partnership and LLC investments are also subject to the continuing risk that the taxation treatment of the investment by the appropriate taxation authorities is

10

15

20

25

30

contrary to the taxation treatment presumed by an investor at the time of the investment, which can adversely affect the financial cost and return to an investor.

Under the prior art, numerous debt and equity instruments are described which evaluate risk/reward profiles and attempt to maximize reward while minimizing risk. To the knowledge of the inventor, none of these investments operate to achieve a significant alteration of the traditional risk/reward ratio. Furthermore, few can effectively remove the risk that some or all of the investment may be lost, or remove the ongoing risks of illiquidity, or remove the risk that taxation authorities will treat the investment in an adverse manner not anticipated by the investor and thereby significantly degrade the return on investment anticipated by the investor. Consequently, there is a need to address these limitations in the prior art by providing a method of and apparatus for altering the risk/reward ratio of traditional investments to create an improved type of investment.

BRIEF SUMMARY OF THE INVENTION

The limitations of the prior art discussed above are addressed by the present invention which provides a system employing data processing and computing means for evaluating and managing a risk insured investment, comprising:

- a) a data processing and computing means for processing and computing data;
- a data storage and retrieval means for storing data on a computer readable storage medium;
- c) a residual value insurance means for obtaining, evaluating and selecting a residual value insurance quotation and premium to insure the residual value of an investor's initial investment and any specified minimum return on investment at the end of a specified investment duration;

10

15

20

25

30

- d) a tax advantage evaluation means for evaluating an investment's tax advantages and consequences for said investor in a specified tax jurisdiction and accessing a tax rules database containing tax rules applicable for said tax jurisdiction, said tax advantage evaluation means being operatively interconnected to said residual value insurance means by said data processing and computing means; and
- e) risk/reward evaluation means for evaluating a risk/reward ratio for said investment, said risk/reward evaluation means including means to compare said risk/reward ratio for said investment with said investor's investment risk criteria to determine a match, said risk/reward evaluation means being operatively interconnected to said residual value insurance means and to said tax advantage evaluation means by said data processing and computing means.

Preferably, the tax advantage evaluation means further includes a means for evaluating possible adverse tax treatment by taxation authorities in a given tax jurisdiction and calculating an adverse tax treatment amount.

More preferably, the sytem includes tax treatment insurance means for obtaining, evaluating and selecting a tax treatment insurance quotation and premium to insure against the adverse tax treatment amount, said tax treatment insurance means being operatively interconnected to said residual value insurance means, tax advantage evaluation means and risk/reward evaluation means by said data processing and computing means.

Preferably, the system includes means enabling at least one function of the system, but not all the functions of the system, to be affected manually.

In another aspect, the present invention provides a method employing data processing and computing means for evaluating and

10

15

20

25

managing a risk insured investment, said comprising the steps of:

- a) obtaining, evaluating and selecting a residual value insurance quotation and premium to insure the residual value of an investor's initial investment and any specified minimum return on investment at the end of a specified investment duration;
- b) evaluating an investment's tax advantages and consequences for said investor in a specified tax jurisdiction; and
- c) evaluating a risk/reward ratio for said investment by comparing said risk/reward ratio for said investment with said investor's investment risk criteria to determine a match.

Preferably, the method further comprises the steps of selecting a plurality of potential investments; effecting steps (a), (b) and (c) for each investment; comparing at least the rates of return for the selected potential investments and choosing one potential investment for making an actual investment.

More preferably, the method further includes the step of evaluating possible adverse tax treatment by taxation authorities in a given tax jurisdiction for each potential investment and calculating an adverse tax treatment amount.

Preferably, the method further includes the steps of obtaining, evaluating and selecting a tax treatment insurance quotation and premium to insure against said adverse tax treatment amount, for each potential investment.

In an alternative embodiment, the method may include effecting at least one step, but not all steps, of the method manually.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a block diagram representation of one embodiment of a data processing system according to the present

10

15

20

30

invention;

Figure 2 is a block diagram representation of one example of a type of investment which may be created by the method and data processing system of the present invention;

Figure 3 is a flow chart of a software routine for a main menu used in a data processing system according to the present invention;

Figure 4 is a flow chart for a software routine for running the residual value insurance sub-system on a data processing system according to the present invention;

Figure 5 is a flow chart of a software sub-routine in the residual value insurance sub-system depicted in Figure 4;

Figure 6 is a flow chart of a software routine for running the taxation advantage sub-system on a data processing system according to the present invention;

Figure 7 is a flow chart of a software routine for running the taxation treatment insurance sub-system on a data processing system according to the present invention;

Figure 8 is a flow chart of a software sub-routine in the taxation treatment insurance sub-system depicted in Figure 7;

Figure 9 is a flow chart of a software routine for running the risk reward evaluation sub-system on a data processing system according to the present invention; and

Figure 10 is a flowchart of a sub-routine in the risk reward evaluation sub-system depicted in Figure 9.

25 <u>DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS</u>

The present invention is directed to a system and method for creating an improved type of investment in which the risk/reward ratio of traditional types of investments is altered to permit higher reward against a significantly lower or eliminated risk of investment loss and the elimination of the risk of illiquidity. Specifically, the present invention utilizes a data processing system to evaluate and determine (i) the

10

15

20

25

30

quantum and type of residual value insurance required to protect against a total or partial loss of the investor's investment, which may include a stipulated return, over the term of the investment; (ii) the taxation consequences of the investment to an investor, using a proposed business structure, in the jurisdiction in which the investment is taxable; (iii) optionally, the quantum and type of taxation treatment insurance required to insure against adverse taxation consequences; and (iv) the risk/reward ratio of further investments in business assets or enterprises.

Advantageously, the invention permits an investor to make an investment that combines all of the unique attributes of (i) a fully guaranteed repayment of the investor's investment, which may include a stipulated return on the investment; (ii) advantageous taxation treatment of the investment, which can serve to lower the actual "after-tax" cost of the investment, while retaining the full investment advantage of the entire amount of the investment; (iii) insurance against adverse taxation consequences; (iv) an alteration of the traditional investment risk/reward ratio to permit a higher reward against a significantly lower or eliminated risk of investment loss; and (v) the elimination of the risk of illiquidity.

Referring now to Figure 1, a block diagram of one embodiment of the present invention is generally referred to by reference numeral 20. An investor 22 interacts with an investment manager 24 that is responsible for collecting, managing and evaluating various investment opportunities using the data processing system of the present invention. The investor 22 may be an individual or a business entity. The investment manager 24 may also be an individual or a business entity. Also, it is possible that the investor 22 can act as his/her/its own investment manager 24.

As shown in Figure 1, the system comprises several subsystems which interact with each other. A first sub-system is called the risk/reward evaluation sub-system ("RRES") 26. The RRES 26 has access to a risk/reward ratio database stored in RRES database 28. The risk/reward ratios are calculated through interaction between the sub-

10

15

20

25

30

systems of the data processing system as will be explained further below.

A second sub-system referred to as the residual value insurance sub-system ("RVIS") 30 interacts with RRES 26 and provides output based on input provided by the investor 22 and/or investment manager 24. The RVIS 30 has access to RVIS database 32. The RVIS 30 is capable of requesting and obtaining a number of quotations from one or more residual value insurance ("RVI") companies 34, as explained further below.

A third sub-system is the tax advantage sub-system ("TAS") 36 which evaluates the tax advantages and consequences of a particular investment based on input provided by the investor 22 and investment manager 24. The TAS 36 also interacts with the RVIS 30 and the RRES 26. The TAS 36 has access to tax advantage database 38 which includes a set of tax rules relating to one or more tax jurisdictions. This tax advantage database 38 is updated and maintained to keep the tax rules current. This tax rules database may also be optionally provided and maintained by a third party.

A fourth, optional sub-system is the tax treatment insurance sub-system (TTIS) 40 which evaluates the amount of taxation treatment insurance required to insure against adverse taxation treatment by relevant taxation authorities relating to a particular type of investment in a particular tax jurisdiction. The TTIS 40 interacts with the RRES 26, RVIS 30 and TAS 36. The TTIS 40 provides output based on input provided by the investor 22, investment manager 24 and one or more other sub-systems of the data processing system. The TTIS 40 also has access to a TTIS database 42. The TTIS 40 may interact with one or more tax treatment insurance ("TTI") companies 44 as explained further below. Finally, as shown in Figure 1, the investor 22 and/or investment manager 24 may also interact with a lender 46 to borrow for an investment made by investor 22. Further details of the system and method according to the present invention is provided below.

Now referring to Figure 2, a simplified block diagram of one

10

15

20

25

30

specific example is shown and generally referred to by reference numeral 50. Figure 2 more clearly shows an investment 52 which is managed and administered by an investment manager 24 and offered to investor 22. In this example, the investment manager 24 uses RVIS 30 of the data processing system to obtain a residual value insurance policy 54 for the investment 52. The RVI policy 54 is obtained from an RVI company 34 which issues the RVI policy 54 in return for an insurance premium paid by the investment manager 24. Optionally, the investor 22 may obtain a loan from a lender 46 to finance all or part of the investment. In addition to paying principal and interest on the loan to the lender 46, the investor 22 may pledge a beneficial interest in the RVI policy as security for the loan. The loan may be of the "limited recourse loan" type and, under the terms of the loan, the investor may be entitled to "put" the RVI policy to the lender in satisfaction of the principal and interest outstanding on the loan. A "put" is a contractual agreement between two parties in which the party with the "put" has an option or right, at a time specified or defined in the future, to transfer to, and the other party has an obligation to accept, tangible or intangible assets for a stipulated consideration.

Now referring to Figure 3, a flow chart of a software routine for a main menu used in the data processing system according to the present invention is shown generally as 60. Block 62 is the starting point of the software routine 60. At block 64, the system displays the main menu for access by a user, such as the investment manager 24 or investor 22. At block 66, a menu choice is entered by the user which is tested for validity at block 68. If a valid choice is not entered, the system returns to block 66. If a valid choice is entered at block 68, the system proceeds to block 70 where it is determined whether the RVIS option has been chosen. If so, the system proceeds to block 74. At block 74, the system determines whether the TAS option has been chosen. If yes, the system proceeds to entry point B shown in block 76; if not, the system proceeds to block 78. At block 78, the system determines whether the TTIS option has been chosen. If so, the system determines whether the TTIS option has been chosen. If so, the system

15

20

25

30

proceeds to entry point C which is shown at block 80; if not, the system proceeds to block 82. At block 82, the system determines whether the RRES option has been chosen. If so, the system proceeds to entry point D shown at block 84; if not, the system proceeds to block 86. At block 86, the system determines whether the user wishes to exit the system. If so, the system proceeds to block 88 where the system ends operations; if not, the system returns to block 64 where the main menu is displayed. Entry point E shown at block 90 allows other routines, which will be described below, to return to the main menu routine.

Now referring to Figure 4, a flow chart of a sub-routine used by the RVIS 30 is generally referred to by reference numeral 100. The RVIS 30 includes means to evaluate the amount, type and duration of residual value insurance required to guarantee (i) the value of the entire amount (or stipulated portion of the amount) of the investment for a stipulated term, and where specified, (ii) the receipt by an investor of a stipulated minimum return on investment ("ROI") over the stipulated term of the investment. It will be understood that each RVI company will evaluate the proposed investment in accordance with usual factors considered by insurance companies. In addition to the factors of amount, investment type, duration, and where applicable, a guaranteed minimum ROI, an RVI company will almost always quantify the risk involved, which is related to the investment type. For this purpose, the RVI company can rely in information provided by the investment manager 24 as to the investment type and/or information obtained from independent sources. various factors will affect the insurance quotation and premium amount.

In Figure 4, entry point A is shown at block 72. From block 72, the system proceeds to block 102 where a sub-menu is displayed to the user. The user enters a sub-menu choice at block 104. The system proceeds to block 106 where the sub-menu choice is checked for validity. If a valid choice has been entered, the system proceeds to block 108; if not, the system returns to block 104. At block 108, the system determines whether the user wishes to submit a request for quotation ("RFQ") for residual value

15

20

25

30

insurance. If yes, the system proceeds to block 110 where the investment amount is provided as an input by the investment manager 24. The system next proceeds through blocks 112, 114 and 116 to receive relevant input including, but not limited to, investment type, investment duration and minimum ROI, if any. The system next proceeds to block 118 where the information input by the user is stored on a data storage means such as a high speed hard disk, RAM, diskette, streaming tape, or any other suitable computer readable storage device. The system next proceeds to block 120 where a RFQ is prepared using the stored investment and ROI information. Next, the system proceeds to block 122 where the prepared RFQ is stored. The system then proceeds to blocks 124a-c where the RFQ is output to one or more RVI companies 34 for response. The system then proceeds to entry point E shown at block 90 which returns the investment manager 24 back to the main menu shown at block 64 (Figure 3).

Still referring to Figure 4, if at block 108, it is determined that an RFQ is not to be submitted, the system proceeds to block 126. At block 126, the system determines whether the requested quotations should be retrieved. If yes, the system proceeds to block 128 where quotes provided in response to the RFQ by one or more RVI companies at block 130a-c are received; if no, the system proceeds to block 138. From block 128, the system proceeds to block 132 where is it determined whether the user requested quotes have been received by the system. If yes, the system proceeds to entry point F shown at block 136 (to Figure 5); if no, the system proceeds to block 134 where an output message indicates that the quote or quotes are not ready. From block 134, the system proceeds to block 138. At block 138, the system determines whether the user wishes to exit the subroutine 100. If yes, the system proceeds to entry point E shown at block 90 (to Figure 3); if no, the system proceeds back to block 102 and displays the sub-menu.

While one specific embodiment of the RVIS 30 has been described, it will be appreciated that various other embodiments are possible. Specifically, the RVIS 30 may be interactively connected to the

10

15

20

25

30

computer communication facilities of one or more RVI companies 34 that provide such insurance, and the RFQ and quotation process may be handled electronically and automatically. In such a case, it may be possible to receive quotations immediately upon providing an RFQ.

- 15 -

Now referring to Figure 5, a sub-routine 140 of the RVIS 30 is shown with entry point F at block 136 (from Figure 4). From block 136, the system proceeds to block 142 where a data storage means is accessed to store the RVI quotations received from one or more RVI companies 34. The system then proceeds to block 144 where RVI company 34 ratings are retrieved from a data storage means. The RVIS 30 receives information about RVI companies and regularly evaluates their creditworthiness, history, performance levels, policy payments and other relevant factors. Specifically, the RVIS 30 can review the international insurance ratings of an RVI company (provided by an international rating agency such as Standard & Poor's) or take into consideration whether an unrated or low rated company can or has obtained reinsurance for the risks covered by its proposed insurance policy from a reinsurance company with a rating or higher rating. Furthermore, the RVIS 30 takes into consideration whether the risks covered by the reinsurance company are or can be further reinsured. The RVI company ratings are used together with the quotations provided by those companies to evaluate and rank the RVI quotations at block 146. The system proceeds from block 146 to block 148 where the most favourable RVI quotation is selected based on the ranking calculated at block 146. If two or more rankings are identical, the RVI quotation may be selected arbitrarily from those quotations which have the same ranking. The system then proceeds to block 150 where the selected RVI quotation and its premium are stored on a data storage means. The RVI quotation and its premium are also provided as an output at block 152. From block 152, the system proceeds to entry point E shown at block 90 (to Figure 3).

Now referring to Figure 6, a flow chart of a software subroutine used by the TAS 36 is shown and generally referred to by reference

10

15

20

25

30

numeral 160. The taxation advantage subsystem includes means to evaluate the tax consequences of an investment for a particular investor, using a particular business structure, in an investor's particular tax jurisdiction. Factors considered by the TAS 36 include, but are not limited to: (i) the taxation consequences to the investor of the beneficial interest in an RVI policy and/or any disposition thereof; (ii) the deductibility of expenses that may be incurred through the investment; (iii) the ability to attribute any losses of the investment to an investor in order to reduce an investor's taxes otherwise payable; and (iv) other relevant taxation considerations that may serve to render the investment better or worse from a tax perspective.

In Figure 6, entry point B is shown at block 76 (from Figure 3). From block 76, the system proceeds to block 162 where the sub-menu for the sub-routine is shown. An user enters a menu choice at block 164 and the validity of the choice is tested at block 166. If a valid choice has been entered, the system proceeds to block 168; if not, the system proceeds back to block 164. At block 168, the system determines whether the user wishes at that time to evaluate the tax advantages and consequences of a particular investment opportunity. If yes, the system proceeds to block 170 where the tax jurisdiction in question is entered by the user. The system then proceeds to block 172 where the user enters the type of business structure (e.g. corporation, partnership, etc.) to be used in the investment opportunity. The system then proceeds to block 174 where any RVI quotation and premium selected by the RVIS 30 is provided as an input. If an RVI quotation and premium has not already been selected, the system may return to the main menu to run the RVIS 30 sub-routine before proceeding. Alternatively, the TAS 36 may proceed without considering the RVI quotation and premium as an input. From block 174, the system proceeds to block 175 where other investment factors may be provided as an input (e.g. whether an investor 22 intends to borrow or is borrowing to make an investment). From block 175, the system then proceeds to block 176 where the input information is stored on a data storage means. The system then proceeds to block 178 to access the tax rules for the particular tax jurisdiction identified in block 170. Tax rules may be provided as part of the system of the present invention, or they may be obtained by accessing a third party database. Using these tax rules and the inputs provided by the user relating to the business structure, and optionally any expenses relating to the investment such as the RVI premium, the system identifies various tax alternatives at block 180. The system then proceeds to block 182 where the tax consequences of each alternative is calculated, taking into account the inputs provided by the investment manager. Next, the system proceeds to block 184 where the alternatives are ranked based on the calculations performed at block 182. The system then proceeds to block 186 where the ranking of the alternatives are stored on a data storage means. Next, the system proceeds to block 188 where the ranking is provided as an output and is optionally printed at block 190. The system then proceeds to entry point E shown at block 90 (to Figure 3).

10

15

25

30

Still referring to Figure 6, at block 168, if the user does not wish to proceed with evaluating the tax advantage and consequences of a particular investment opportunity, the system proceeds to block 192 where it is determined whether or not the investment manager 24 wishes to exit sub-routine 160. If yes, the system proceeds to entry point E shown at block 90 (to Figure 3); if no, the system proceeds back to block 162 and re-displays the sub-menu.

While a specific embodiment for the TAS 36 has been described, it will be appreciated that various modifications may be made to the embodiment.

Now referring to Figure 7, a flow chart of a software sub-routine used by the TTIS 40 is shown and generally referred to by reference numeral 200. The TTIS 40 includes means to evaluate the amount of taxation treatment insurance ("TTI") required to insure against adverse taxation treatment by relevant taxation authorities over a stipulated term of an investment, or a specified portion of a stipulated term of an investment. The TTIS 40 calculates the taxation risks inherent in an

10

15

20

25

30

investment and the financial impact of various adverse taxation treatments, and the anticipated premium that would be charged by a TTI company to provide such TTI.

In Figure 7, entry point C is shown at block 80 (from Figure 3). From entry point C, the system proceeds to block 202 where the TTIS submenu is displayed. The system then proceeds to block 204 where the user enters a sub-menu choice. The choice is tested at block 206 for validity. If the choice is valid, the system proceeds to block 208; if not, the system proceeds back to block 204 and requests a sub-menu choice. At block 208, the system determines whether the user wishes to submit a RFQ for taxation treatment insurance. If yes, the system proceeds to block 210. At block 210, the investment amount is input by the user. The system then proceeds to block 212 where the tax ranking of the TAS 36 (stored in a database at block 186, Figure 6) is received as an input. The system then proceeds to block 214 to identify all potentially adverse tax risks. The system then proceeds to block 216 where adverse tax amounts are calculated by the data processing system. The system then proceeds to block 218 where these calculations and inputs are stored on a data storage means. Using this stored information, the system proceeds to block 220 where an RFQ is prepared. The RFQ is then stored in a data storage means shown at block 222. The RFQ is then output to one or more insurance companies shown at blocks 224a-c. The system then proceeds to entry point E identified at block 90 (to Figure 3).

Still referring to Figure 7, at block 208, if the investment manager 24 does not wish to submit an RFQ, the system proceeds to block 226. At block 226, the system determines whether the investment manager 24 wishes to retrieve quotations submitted by the TTI companies 44. If yes, the system proceeds to block 228 where the quotations from TTI companies 230a-c are received. At block 232, the system determines whether the quotations have been received. If yes, the system proceeds to entry point G shown at block 236 (to Figure 8); if not, the system proceeds to block 234 where a message is output indicating that the quotation is not

15

20

25

30

ready. From block 234, the system proceeds to block 238 where it is determined whether the investment manager 24 wishes to exit the TTIS sub-routine 200. If yes, the system proceeds to entry point E (Figure 3); if no, the system returns to block 202. From block 226, if the investment manager 24 does not wish to retrieve quotations, the system proceeds to block 238. From block 238, the system proceeds to entry point E shown at block 90 (to Figure 3).

Now referring to Figure 8, a sub-routine of the TTIS 40 is shown and generally referred to by reference numeral 240. In Figure 8, entry point G is shown at block 236 (from Figure 7). From the entry point G, the system proceeds to block 242 where the TTI quotations received from one or more TTI companies are stored on a data storage means. Proceeding to block 244, the system retrieves TTI company ratings from a data storage means. The TTIS 40 receives information about TTI companies and regularly evaluates their creditworthiness, history, performance levels, policy payments and other relevant factors. Specifically, the TTIS 40 can review the international insurance ratings of a TTI company (provided by an international rating agency such as Standard & Poor's) or take into consideration whether an unrated or low rated TTI company can or has obtained reinsurance for the risks covered by its proposed insurance policy from a reinsurance company with a rating or higher rating. Furthermore, the TTIS 40 takes into consideration whether the risks covered by the reinsurance company are or can be further reinsured. Proceeding to block 246, the system then calculates the ranking of TTI quotations based on the quotation information and the ratings of the various insurance companies. Proceeding to block 248, the data processing system selects the most favourable TTI quotation. If one or more quotations have the same ranking, one of the quotations may be chosen arbitrarily. The system then proceeds to block 250 where the selected TTI quotation and its premium are stored on a data storage means. Optionally, the TTI quotation and its premium may also be output as shown at block 252. The system then proceeds to entry point E indicated at

15

20

25

30

block 90 (to Figure 3).

While one example of a sub-routine used by the TTIS 40 has been described, it will be apparent that various modifications may be made. For example, the TTIS 40 may be interactively connected to the computer communications facilities of one or more TTI companies that provide such TTI. The TTI RFQ and TTI quotation may be handled electronically and automatically to provide an immediate quote in response to an RFQ provided by the user.

Now referring to Figure 9, a flow chart of a software sub-routine used by the RRES 26 is shown and generally referred to by reference numeral 260. The RRES 26 includes means to evaluate the potential risks and rewards of a contemplated investment given the costs of the RVI premium, TTI premium and other costs that have been determined or allocated. The RRES 26 also takes into consideration whether the investor 22 is investing his/her/its own money or is borrowing from a lender 46, as this will affect the taxation consequences as evaluated by TAS 36 and the return on investment which is considered by the RRES 26 in its calculation of the risk/reward ratio for a specified investment.

In Figure 9, the entry point D is shown at block 84 (from Figure 3). From block 84, the system proceeds to block 262 to display the RRES sub-menu. Proceeding to block 264, the user enters a sub-menu choice and this choice is validated at block 266. If a valid choice has been entered, the system proceeds to block 268; if not, the system returns to block 264. At block 268, it is determined whether the user wishes to calculate the risk/reward ratio for a particular investment. If yes, the system proceeds to block 269. At block 269, information about the investment made by investor 22 is provided as an input by the user, including whether or not the investor 22 intends to borrow any part of the investment amount from a lender 46 and the cost of borrowing that amount. (The TAS 36 may have provided a recommendation that the investor 22 borrow to make the investment or the investor 22 may have

15

20

25

30

no option but to borrow.) The system then proceeds to block 269a where the system determines whether the user has indicated that any part of the investment has been borrowed at block 269. If yes, the system proceeds to block 269a where the system adjusts the reward ratio based on the investment information input by the user, then the system proceeds to block 270; if no, the system proceeds directly to block 270 without adjusting the reward ratio. At block 270, the RVI quotation and premium selected by the RVIS 30 is provided as an input. The system then proceeds to block 272 where the TTI quotation selected by the TTIS 40 is provided as an Next, the system proceeds to block 274 where various miscellaneous costs are entered by the user. If the RVI and TTI quotations have not yet been selected, the system will direct the user to run the subroutines for RVIS 30 and TTIS 40 before proceeding. Proceeding to block 276, the user enters the investment type used in the investment opportunity. The system then proceeds to block 278 where various risk factors of the investment are calculated and weighted. The system then proceeds to block 280 where the various reward factors of the investment are calculated and weighted. Proceeding to block 282, the system provides an output comprising a risk/reward ratio for the particular investment opportunity. This risk/reward ratio information is stored in RRES database 28 (Figure 1) as shown in block 284. The system then proceeds to block 292 where it is determined whether the user wishes to exit the RRES sub-routine 260. If yes, the system proceeds to entry point E at block 90 (to Figure 3); if no, the system proceeds back to block 262 and displays the submenu. At block 268, if the user does not wish to calculate the risk/reward ratio, the system will then proceed to block 288. At block 288 it is determined whether or not the user wishes to select a specific investment for an investor 22. If yes, the system proceeds to entry point H at block 290 (to Figure 10). If no, the system proceeds to block 292 and operates as described above.

Now referring to Figure 10, a flow chart for a software subroutine of the RRES 26 is shown and generally referred to by reference

10

15

20

numeral 300. Entry point H is indicated at block 290. From block 290, the system proceeds to block 302 where the user enters the acceptable risk as indicated by the investor 22. The RRES 26 permits an investor to specify the degree of risk that is acceptable to that investor, from low risk to high risk, and the reward expected from such risk. The RRES 26 comprises data processing means to evaluate these target risks/rewards against known investments in the RRES database 28.

In Figure 10, the system then proceeds to block 304 where the system accesses the risk/reward ratio database 28 (Figure 1). The system then proceeds to block 306 where the RRES database 28 is compared with the acceptable risk provided as an input by the user. Next, the system proceeds to block 308 where it is determined whether or not there is a match between the acceptable risk input by the user (as indicated by the investor 22) and the risk/reward ratio of any of the investment opportunities in the RRES database 28. If yes, the system proceeds to block 310 where the matches are provided as an output and optionally printed as shown in block 312. If no, the system proceeds to block 314 where a message is output indicating that there is no match. From either block 312 or block 314, the system proceeds to entry point E indicated at block 90. The results of the match are provided as an output to the investor 22 and the investor 22 selects an investment which matches the criteria of the investor 22.

EXAMPLE

The investor 22, which is a corporation resident in Jurisdiction A, informs the investment manager 24 that it wishes to make an investment in Jurisdiction A's computer industry (investment 52), preferably in a new technology involved in the manufacturing of computer chips. The investor would like a 20% after tax annual return on investment, but does not want to risk the loss of any of its investment in this high risk industry. The investor is also concerned about the lack of

15

20

25

30

liquidity, since investments in new technologies are not always liquid and the investor, even if the technology succeeds commercially, may not be able to easily sell its investment and realize its profits at the end of the investment period, which the investor has stipulated at 15 years. The investment manager 24 or user would input the foregoing investment goals and criteria into the system 20, along with information as to the investor's tax status and its ability to finance the transaction from cash on hand or through borrowings.

In RVIS 30 the required terms and conditions of a residual value insurance policy would be analyzed to ensure that the investor (a) is insured against the loss of its investments, (b) is insured against the loss of the expected 20% return on investment, and (c) is protected against an inability to sell the investment after the 15 year term in order to realize profits. The invention would communicate these required terms in the residual value insurance policy to appropriate residual value insurance companies, receive quotations back from these companies and evaluate and select the best quotation for the investor's needs.

In TAS 36 the tax consequences to the investor of this type of investment would be analyzed, and the TAS 36 may recommend, for example, that the investor should use borrowed money to make the investment, since the interest payments will be deductible against income, thereby reducing the investor's after-tax investment. The TAS 36 may also recommend that the investment should be made in the format of a license to a patent, rather than in a purchase of shares or debt in the company that owns the patent since, in Jurisdiction A, license rights receive an accelerated depreciation for tax purposes, which again significantly reduces the investor's after-tax investment.

Optionally, in TTIS 42 the taxation risks of adverse taxation treatment by Jurisdiction A's taxation authority may be analyzed and quantified. These risks could then be addressed by obtaining and analyzing appropriate quotations from insurance companies able to offer this type of insurance to the investor.

15

20

25

The system 20 would ensure that all factors - the cost of the investment, the costs of the residual value insurance and the tax treatment insurance, the tax deductions available to the investor by using the recommended structure in the designated jurisdiction with borrowed money, the resulting risk/reward ratio, the efficacy of the residual value insurance and the efficacy of the tax treatment insurance to insure against unacceptable risks - were analyzed together to achieve the optimum mix of attributes for that particular investor in that kind of investment in that particular jurisdiction. Based on this analysis, the system 20 may recommend, for example, an investment in a license to a new patented technology for manufacturing computer chips, which license would be purchased by the investor from the patent owner or licensee of the patent.

While a particular embodiment of the method of and apparatus for practising the present invention has been shown and described, it will be appreciated that various modifications may be made without departing from the scope of the invention which is defined by the following claims. In particular, while an integrated system has been described, it will be appreciated that various parts of the system could be affected independently with communication with the rest of the system affected in any suitable way, including manual inputs. Additionally, some of the databases, for example for tax rules, could be provided by independent third party suppliers. Some aspects could, or may have to be, implemented manually, or at least to some extent. For example a new and unusual investment in an emerging industry may not be susceptible to conventional risk/reward evaluation and possibly the only way to achieve any evaluation would be by consultation with suitably experienced financial advisors.

15

20

25

I CLAIM:

- 1. A system employing data processing and computing means for evaluating and managing a risk insured investment, comprising:
- a) a data processing and computing means for processing and computing data;
 - a data storage and retrieval means for storing data on a computer readable storage medium;
 - c) a residual value insurance means for obtaining, evaluating and selecting a residual value insurance quotation and premium to insure the residual value of an investor's initial investment and any specified minimum return on investment at the end of a specified investment duration;
 - d) a tax advantage evaluation means for evaluating an investment's tax advantages and consequences for said investor in a specified tax jurisdiction and accessing a tax rules database containing tax rules applicable for said tax jurisdiction, said tax advantage evaluation means being operatively interconnected to said residual value insurance means by said data processing and computing means; and
 - e) risk/reward evaluation means for evaluating a risk/reward ratio for said investment, said risk/reward evaluation means including means to compare said risk/reward ratio for said investment with said investor's investment risk criteria to determine a match, said risk/reward evaluation means being operatively interconnected to said residual value insurance means and to said tax advantage evaluation means by said data processing and computing means.
 - 2. The system recited in claim 1, wherein, said tax advantage

25

evaluation means further includes a means for evaluating possible adverse tax treatment by taxation authorities in a given tax jurisdiction and calculating an adverse tax treatment amount.

- 3. The system recited in claim 2, further including a tax treatment insurance means for obtaining, evaluating and selecting a tax treatment insurance quotation and premium to insure against said adverse tax treatment amount, said tax treatment insurance means being operatively interconnected to said residual value insurance means, tax advantage evaluation means and risk/reward evaluation means by said data processing and computing means.
 - 4. The system recited in claim 1, wherein, said residual value insurance means includes as inputs an investment amount, an investment type, and an investment duration.
- 5. The system recited in claim 4, wherein, said residual value insurance means further includes as an input a specified minimum return on investment.
 - 6. The system recited in claim 1, wherein, said residual value insurance means includes means for preparing a request for quotation to be sent to one or more residual value insurance companies and receiving back from said residual value insurance companies one or more residual value insurance quotations and premiums.
 - 7. The system recited in claim 6, wherein, said residual value insurance means further includes means for retrieving residual value insurance company ratings to evaluate and rank said residual value insurance quotations and premiums.
 - 8. The system recited in claim 7, wherein, said residual value

insurance company ratings are derived from any international insurance ratings of said residual value insurance companies.

- 9. The system recited in claim 1, wherein, said tax advantage evaluation means includes as inputs said specified tax jurisdiction, a business structure, and costs of said investment including said selected residual value insurance quotation and premium.
- 10. The system recited in claim 9, which includes said tax rules database as an element of the tax advantage evaluation means, wherein said tax rules database includes tax rules for a plurality of tax jurisdictions in which said investment will be available and in which said investor resides as one of a taxable individual and a taxable business entity.

10

20

25

- 11. The system recited in claim 10, wherein, said tax rules database is regularly updated to reflect the most current tax rules for each of said plurality of tax jurisdictions.
- 15 12. The system recited in claim 9, wherein, said tax advantage evaluation means includes means to calculate taxation consequences and to rank one or more tax alternatives for said investment.
 - 13. The system recited in claim 1, wherein, said risk/reward evaluation system includes a risk/reward database to store said risk/reward ratios, said risk/reward database providing a database of investments having calculated risk/reward ratios against which said investor's investment risk criteria are matched.
 - 14. The system recited in claim 13, wherein, said risk/reward evaluation system provides an output of the result of a match to said investor to advise said investor of an investment which matches said investor's investment risk criteria.

- 15. The system recited in claim 1, wherein, said risk/reward evaluation system adjusts said risk/reward ratio based on the amount borrowed by said investor for said initial investment.
- 16. A system as claimed in claim 1, which includes means enabling at least one function of the system, but not all the functions of the system, to be affected manually.
 - 17. A method employing data processing and computing means for evaluating and managing a risk insured investment, said comprising the steps of:
- a) obtaining, evaluating and selecting a residual value insurance quotation and premium to insure the residual value of an investor's initial investment and any specified minimum return on investment at the end of a specified investment duration;
- b) evaluating an investment's tax advantages and consequences for said investor in a specified tax jurisdiction; and
 - c) evaluating a risk/reward ratio for said investment by comparing said risk/reward ratio for said investment with said investor's investment risk criteria to determine a match.
- 20 18. A method as claimed in claim 17, including: selecting a plurality of potential investments; effecting steps (a), (b) and (c) for each investment; comparing at least the rates of return for the selected potential investments and choosing one potential investment for making an actual investment.
- 25 19. The method recited in claim 18, further including the step of evaluating possible adverse tax treatment by taxation authorities in a given tax jurisdiction for each potential investment and calculating an

15

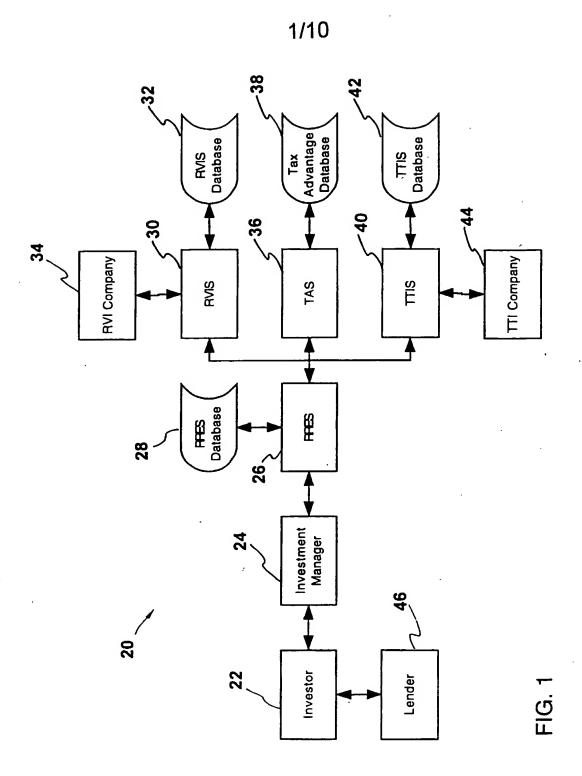
25

adverse tax treatment amount.

- 20. The method recited in claim 19, further including the steps of obtaining, evaluating and selecting a tax treatment insurance quotation and premium to insure against said adverse tax treatment amount, for each potential investment.
- 21. The method recited in claim 18, further comprising the step of providing as inputs, for each potential investment, an investment amount, an investment type, and an investment duration.
- 22. The method recited in claim 21, further comprising the step of providing as an input, for each potential investment, a specified minimum return on investment.
 - 23. The method recited in claim 18, further comprising the steps of, for each potential investment, preparing a request for quotation to be sent to one or more residual value insurance companies and receiving back from said residual value insurance companies one or more residual value insurance quotations and premiums.
 - 24. The method recited in claim 23, further comprising the step of retrieving residual value insurance company ratings to evaluate and rank said residual value insurance quotations and premiums.
- 20 25. The method recited in claim 24, including rating said residual value insurance company from any international insurance ratings of said residual value insurance companies.
 - 26. The method recited in claim 25, further comprising, for each potential investment, the steps of providing as inputs for step b) a specified tax jurisdiction, a business structure, and costs of said investment

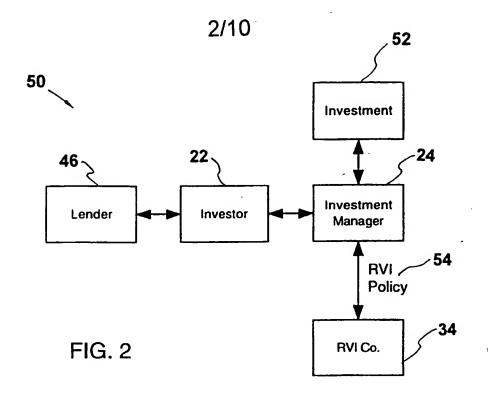
including said selected residual value insurance quotation and premium.

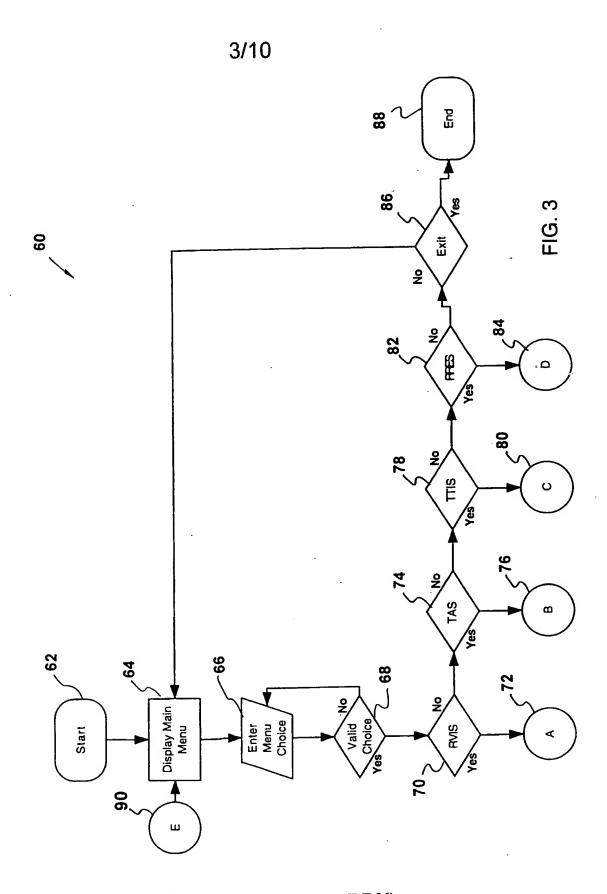
- 27. The method recited in claim 26, further comprising the step of accessing a tax rules database which includes tax rules for a plurality of tax jurisdictions in which said investments will be available and in which said investor resides as one of a taxable individual and a taxable business entity.
- 28. The method recited in claim 27, further comprising the step of providing said tax rules database and of regularly updating said tax rules database to reflect the most current tax rules for each of said plurality of tax jurisdictions.
- 29. The method recited in claim 26, further comprising the step of calculating the taxation consequences for each of said potential investments and ranking one or more tax alternatives for each of said potential investments.
- 15 30. The method recited in claim 18, further comprising the step of providing in step (c) a risk/reward database to store said risk/reward ratios, said risk/reward database providing a database of investments having calculated risk/reward ratios against which said investor's investment risk criteria are matched.
- 20 31. The method recited in claim 30, further comprising the step of providing an output of the result of a match to said investor to advise said investor of an investment which matches said investor's investment risk criteria.
- 32. A method as claimed in claim 18, which includes effecting at least one step, but not all steps, of the method manually.



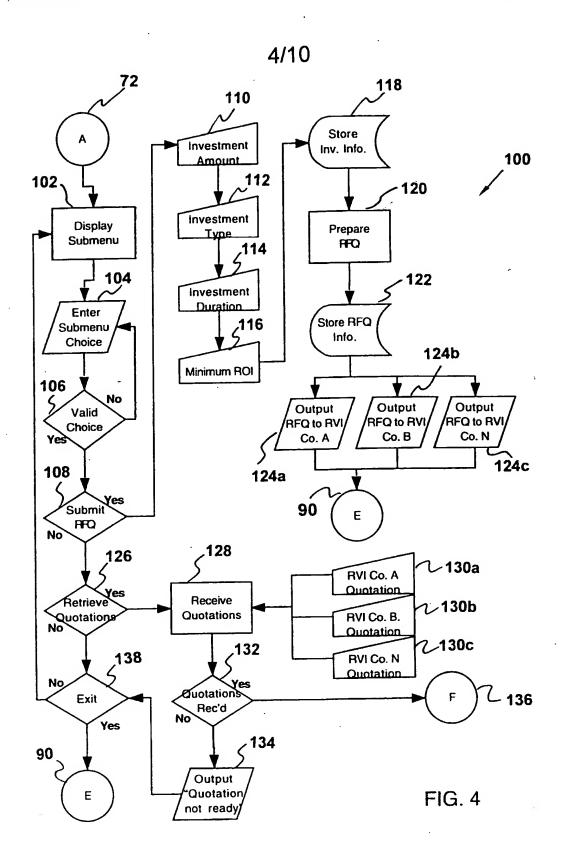
SUBSTITUTE SHEET (RULE 26)

PCT/CA00/00668

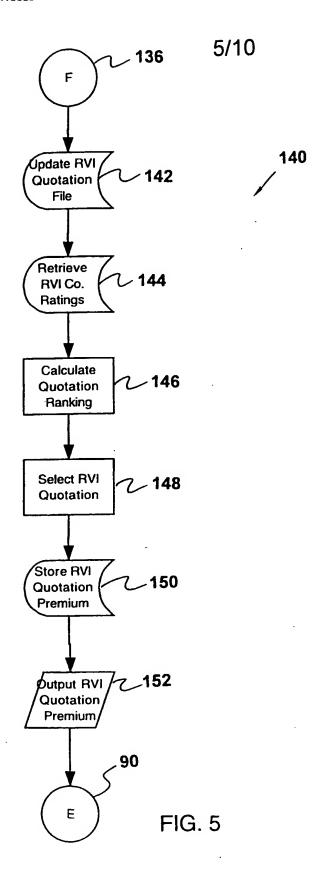




SUBSTITUTE SHEET (RULE 26)

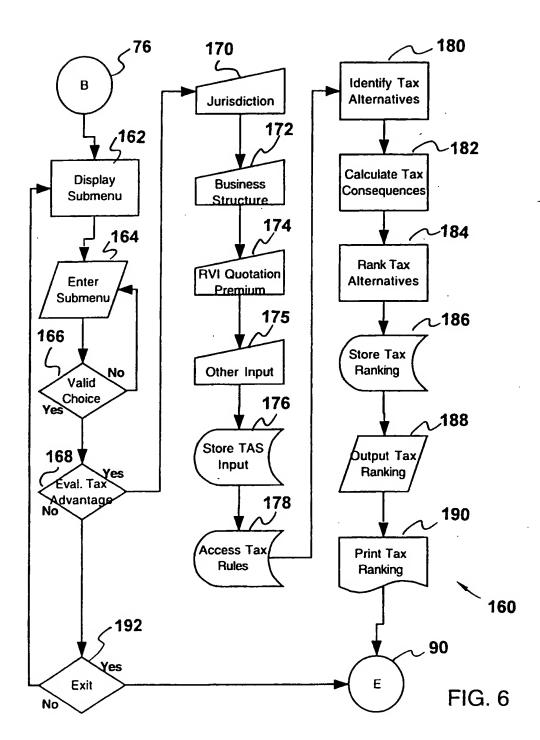


SUBSTITUTE SHEET (RULE 26)

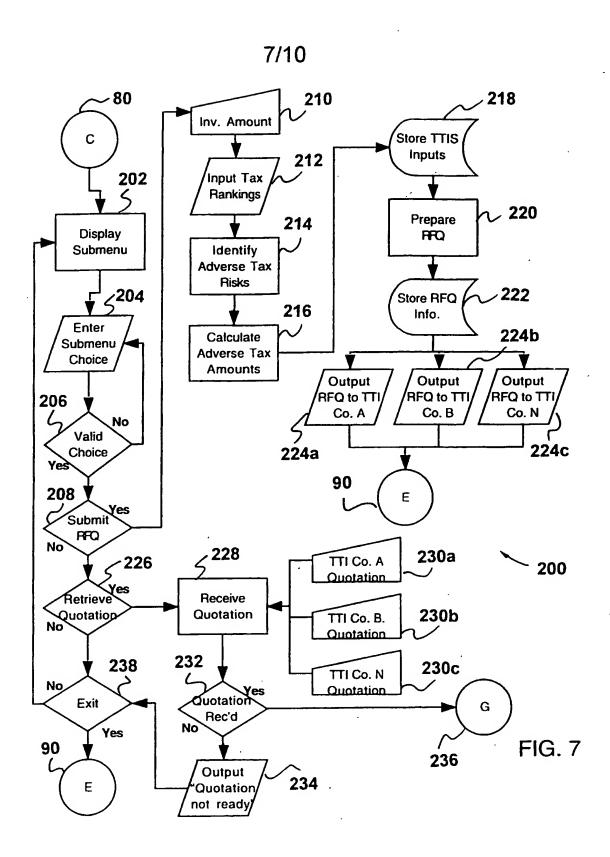


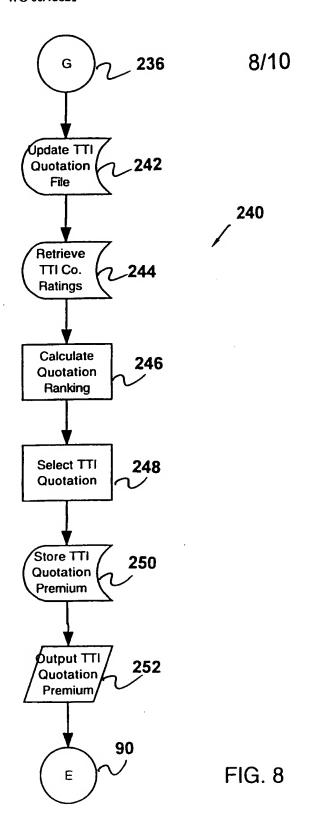
SUBSTITUTE SHEET (RULE 26)

6/10

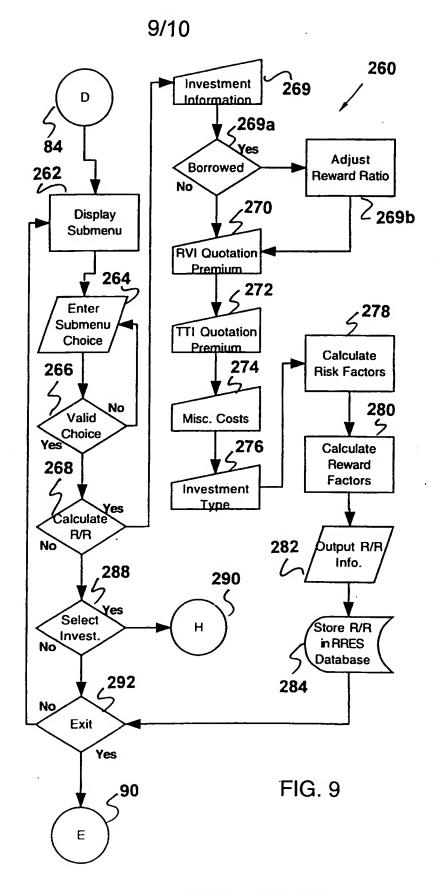


PCT/CA00/00668





PCT/CA00/00668



SUBSTITUTE SHEET (RULE 26)

WO 00/75821 PCT/CA00/00668

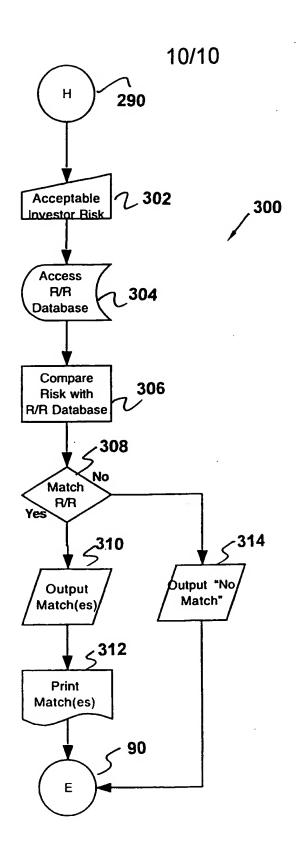


FIG. 10